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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/872,659	06/10/97	NAGY	S 016199/1110

IM11/0821  
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EXAMINER  
RABAGO ROBERTO

ART UNIT	PAPER NUMBER
1713	

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DATE MAILED: 08/21/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**Application No.  
**08/872,659**Applicant(s)  
**Nagy et al.**Examiner  
**Roberto Rabago**Group Art Unit  
**1713**☒ Responsive to communication(s) filed on Dec 12, 1997☐ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.☒ Claim(s) 1-20 is/are rejected.☐ Claim(s) \_\_\_\_\_ is/are objected to.☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.**Application Papers**☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.☒ The specification is objected to by the Examiner.☒ The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119**☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)**☒ Notice of References Cited, PTO-892☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_☐ Interview Summary, PTO-413☐ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### **DETAILED ACTION**

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

### ***Oath/Declaration***

*N.* The declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02. The declaration is defective because it does not state that the person making the oath or declaration in a continuation-in-part application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international

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filing date of the continuation-in-part application. The new oath or declaration must include both the statement regarding the duty to disclose and a reference to the parent application as required by 37 CFR 1.63(d).

### *Specification*

- ✓ 3. The disclosure is objected to because of minor informalities. On page 4, line 6 the second drawn structure for “Y” has only three bonds indicated, and the structure does not indicate both of the bond locations required of a linking group. It would appear that Applicants meant for the fourth bond to extend through the left bracket as indicated on the two other structures. Appropriate correction is required.

### *Claim Objections*

- ✓ 4. Claims 17-19 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Specifically, composition claims 17 and 18 depend from method claim 16, and method claim 19 depends from composition claim 17. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims will be further examined assuming Applicants meant for these claims to be method claims.

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***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

✓ 6. Claims 1 and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because:

✓ a) in claim 1, the second drawn structure for "Y" has only three bonds indicated, and the structure does not indicate both of the bond locations required of a linking group. It would appear that Applicants meant for the fourth bond to extend through the left bracket as indicated on the two other structures. Claim 15 has the same problem.

✓ b) claim 1 lacks bracketing around the portion of the pyridine structure corresponding to the subscript "a." A catalyst wherein the subscript "a" corresponds to the entire molecule does not find basis in the disclosure. Claim 15 includes clearly specified bracketing.

✓ c) claim 15 requires the word "or" between the two structures at the top of page 24 to clearly indicate that the two structures are optional selections for X.

✓ d) claim 16 recites a catalyst but specifies no structural details whatsoever.

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~~e~~claim 17 includes a structure, but no reference to it in the claim. It would appear that Applicants intended to have the structure in claim 17 accompany claim 16, and claims 16 - 19 will be examined as such.

Appropriate corrections to the above claims are required.

***Claim Rejections - 35 USC § 102/103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being obvious over Nagy et al.

5,637,660 (Nagy). The applied reference has a common inventor with the instant application.

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Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application of any unclaimed subject matter prior to the effective U.S. filing date of the reference under 37 CFR 1.131.

Nagy discloses all of the limitations of the instant claims with the exception of a small number of optional embodiments. The additional optional elements disclosed do not reveal distinctly patentable structures or processes, but describe only minor differences well known in the art. Specifically, the differences between Patent claim 1 and instant claim 15 are as follows:

a) instant claim 15 contains an additional option for Y wherein P is substituted for N. It is well known in the art that phosphorus and nitrogen have similar properties, and substitution of one for the other would be obvious. Further, Applicants disclose no examples or unexpected properties of phosphorus in the specified position.

b) instant claim 15 contains additional options for R and X. The indicated groups are all well-known optional pendant groups used in polymerization catalysts. Applicants disclose no examples or unexpected properties of these optional groups in the specified position.

c) M is extended to include most of the transition series. It is well-known in the art to substitute various transition metals in polymerization catalysts to achieve specific polymerization results.

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d) additional options are given for the number of each of the various groups directly attached to M. It would be obvious for one skilled in the art to change the distribution of substituents since it is well known that the steric environment of the catalyst determines certain properties of the resulting polymer. Further evidence that this difference is an obvious alteration to the generic process is that Patentee discloses in example 1 (but does not claim) the use of more than one pyridine group.

Instant claims 1-14, drawn to a catalyst, involve the same structural differences as those discussed in items a - d above, and are held obvious over the catalysts described in the cited patent for the same reasons.

The disclosure by Nagy in combination with knowledge commonly known to one of ordinary skill is held to provide a description of the claimed invention and the motivation to include optional alternative embodiments. The reasonable expectation of making and using such combinations renders the instant claim obvious.

✓10. Claims 15-20 are directed to an invention not patentably distinct from claim 1 of commonly assigned US Patent 5,637,660, for the reasons set forth in paragraph 9 above. This reference would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78© and 35



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U.S.C. 132 to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g).

### ***Double Patenting***

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

✓12. Claims 15-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,637,660. Although the conflicting claims are not identical, they are not patentably distinct from each other because the

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instant claims fully encompass that patented without adding additional required elements. The embodiments wherein  $a=1$ ,  $b=1$ ,  $c=2$  and Y, L and X are any of the groups indicated in the patent are specifically claimed in the patent. The generic process as well as all of the specific embodiments claimed in the patent are also claimed in the instant application.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Valvassori et al. 3,900,452 is useful background material and suggests in general terms the use of a polymerization catalyst wherein titanium is linked via a heteroatom to a pyridine or quinoline compound (column 4, line 54+). However, the reference lacks the required detail and motivation to lead one of ordinary skill to the specific catalyst structures claimed by Applicants.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Rabago whose telephone number is (703) 308-4347.

RR *RR*

August 17, 1998

  
Jeffrey Smith  
Supervisory Patent Examiner  
Technology Center 1700